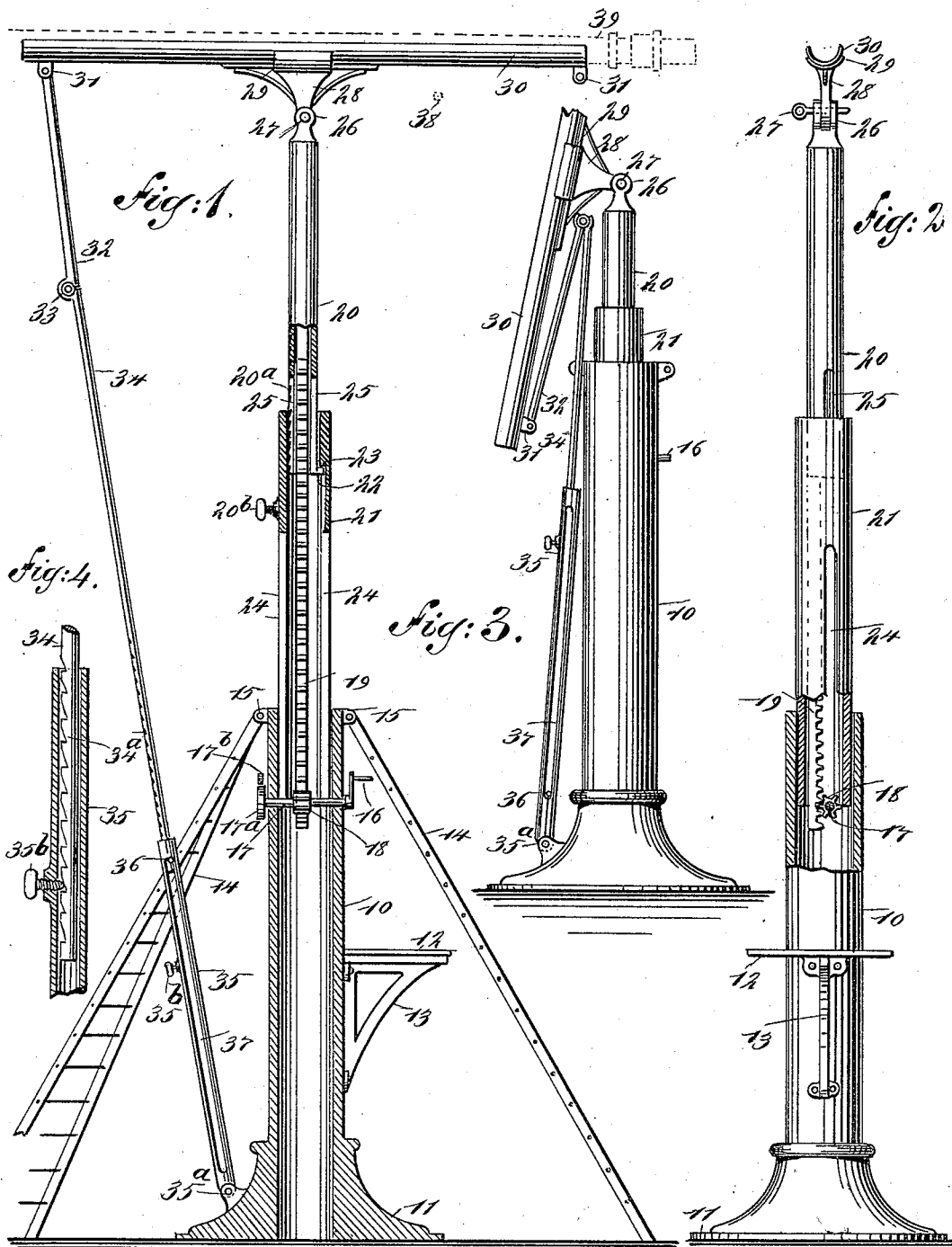


(No Model.)

J. BLAKE & E. F. BEGIEBING.
HOSE BRIDGE AND TOWER.

No. 515,278.

Patented Feb. 20, 1894.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JAMES BLAKE AND EMIL F. BEGIEBING, OF UNION, NEW JERSEY.

HOSE BRIDGE AND TOWER.

SPECIFICATION forming part of Letters Patent No. 515,278, dated February 20, 1894.

Application filed October 4, 1893. Serial No. 487,161. (No model.)

To all whom it may concern:

Be it known that we, JAMES BLAKE and EMIL F. BEGIEBING, of the town of Union, county of Hudson, and State of New Jersey, have invented a new and Improved Hose Bridge and Tower, of which the following is a full, clear, and exact description.

Our invention relates to improvements in that class of devices which are used for carrying a hose across a railway track so that in case of fire, when the hose is laid across the track, it does not interfere with the free running of cars.

The object of our invention is to produce a strong, simple and comparatively inexpensive apparatus of this kind, which may be quickly erected at the side of a track or between the tracks where double tracks occur, which may be quickly and rapidly extended to make it the necessary height, which has means for holding a hose securely, which is adapted to carry the hose over the trolley wire of an overhead electric street railway system, which is provided with a telescoping brace to enable it to be easily folded and collapsed into a small compass, and which may be used as a tower upon which the firemen may climb and from which they may play the hose upon an adjacent building.

To these ends our invention consists of certain features of construction and combinations of parts, as will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar figures of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of our improved apparatus, showing it in extended position and with the body portion of the apparatus in section. Fig. 2 is a broken side elevation, partly in section and at right angles to the view shown in Fig. 1. Fig. 3 is a broken side elevation of the apparatus in its collapsed position; and Fig. 4 is a detail longitudinal section showing the connection between the middle and lower section of the extensible brace.

The apparatus is provided with a telescoping body, the lower or foot section 10 of which

is hollow and provided at the bottom with a broad foot or base 11 on which it can firmly stand, and on one side of this foot section is a platform 12 supported by a suitable bracket 13 and reached by means of one of the ladders 14, which ladders are pivoted to the top of the foot section, as shown at 15, and extend in opposite directions, serving as braces as well as ladders and if desired, more of these ladders may be used and grouped around the base, as described.

The platform 12 is to enable a person to conveniently reach the crank 16 which is near the upper end of the foot section 10 and is secured to a shaft 17 journaled transversely in the foot section and carrying a pinion 18 which meshes with a vertical rack 19 extending into the upper section 20 of the body and through the middle section 21. The upper section 20 is provided at its lower end with a flange 22, which fits against a shoulder 23 near the top of the section 21, and consequently when the section 20 is raised it slides from the section 21 until the flange 22 strikes the shoulder 23 when this section 21 is also raised. The section 21 slides in the foot section 10 and both the sections 21 and 20 are slotted vertically, as shown at 24 and 25, to enable them to slide over the shaft 17. The section 20 may also be held at any desired height by means of the set screw 20^b which projects through the upper portion of the section 21 and engages teeth 20^a in the side of the section 20. It will thus be seen that by adjusting the said screw in relation to the teeth, the height of the tower may be regulated. The rack may be raised so as to lift the sections 20 and 21, as specified, while said sections are held up by means of a ratchet wheel 17^a on the shaft 17 and a pawl 17^b which engages it, or by a device equivalent to the ratchet wheel and pawl.

The top section 20 has at its upper end a box or sleeve 26 to receive the pin 27 by which the bracket 28 is hinged to the top of the body of the apparatus, and this bracket terminates at its upper end in a semi-cylindrical socket 29 adapted to receive and support the hose holder 30 which is also of a semi-cylindrical shape and is fastened near the cen-

ter into the socket of the bracket 28. The hose holder 30 may have its sides extended up high enough to project above the hose, if desired, so as to protect the hose from injury in case anything should fall upon the tower.

The hose holder 30 has depending lugs 31 near the ends, to one of which is secured the upper section 32 of the telescoping brace, this upper section 32 being hinged, as shown at 33 to the middle section 34 of the brace, and the latter enters the hollow foot section 35 of the brace, this being hinged to the base 11, as shown at 35^a, and the middle section 34 has at its lower end a laterally extending pin 36 which slides in the longitudinal slot 37 in the section 35, and the movement of the section 34 is thus limited and the section 34 prevented from being entirely pulled out of the section 35. The length of the extensible brace may be limited by means of the construction shown in Fig. 4, so that the brace may be made to correspond with the height of the tower, that is to say, it may, when extended, permit the hose holder to be held in a horizontal position. This construction comprises a series of notches 34^a in the lower end of the middle section 34 of the brace, and a set screw 35^b which is threaded in the thickened portion of the section 35 and is adapted to engage the notches 34^a. It will be seen that by adjusting the screw in the notches, the brace may be made of any necessary length.

The hose holder 30 is adapted to extend at right angles over a trolley wire 38, and the hose 39 shown in dotted lines in Fig. 1, extends through the hose holder and hangs down from either end so as to be suspended above the trolley wire and above the track beneath. The hose holder may be quickly extended or raised by simply turning the crank 16, as described, and it will be seen that the construction of the sectional brace enables the brace to assume its proper position, as shown in Fig. 1, and if desired, a suitable fastening may be used to hold the foot of the section 34 to the top of the section 35.

When the apparatus is extended ladders may be placed against the hose holder, and the device thus serves as a tower from which the firemen may play the hose. When the apparatus is not in use the hose holder is swung into a nearly vertical position, as shown in Fig. 3, the brace is bent at the hinge 33 and telescoped into the foot section 35, the pawl 17 is released from the ratchet wheel, and the sections of the body are allowed to drop together, as shown in Fig. 3, so that the whole apparatus is thus reduced to a very small compass.

If desired, rope ladders may be fastened to the ends of the hose ladder, so that when the holder is erected and extended, as shown in Fig. 1, the ladders will be in position to en-

able a person to readily ascend to the hose holder.

The device is particularly intended for use in connection with railways so as to provide means for spanning the track with the hose without interfering with traffic, but if desired the apparatus may be used at the side of a building or in any required place, in which position it serves as a tower as specified.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. The combination, with the extensible body, and a hose holder hinged to the body, of an extensible brace connecting one end of the hose holder with the base of the body, and means, as the notched section and the thumb screw, for adjusting the length of the brace, substantially as described

2. An apparatus of the kind described, comprising a telescoping body, a crank and rack mechanism for extending the body, and a hose holder hinged to the top section of the body, substantially as described.

3. An apparatus of the kind described, comprising a telescoping body, a crank and rack mechanism for extending the body, a hose holder hinged to the top section of the body, and a sectional folding and telescoping brace secured to the hose holder and the base of the body, substantially as described.

4. An apparatus of the kind described, comprising a body formed of sections adapted to slide one within the other, a crank and rack mechanism for extending the body, a platform on the foot section of the body adjacent to the crank, a hose holder hinged to the upper section of the body, and a folding and extensible brace connecting the hose holder with the base of the body, substantially as described.

5. An apparatus of the kind described, comprising an extensible body formed of sections held to slide one within the other, a crank actuated mechanism for extending the body, a platform on the foot section of the body, ladders pivoted to the foot section of the body above the platform, a hose holder hinged to the top section of the body, and a folding extensible brace pivoted to the hose holder and to the base of the body, substantially as described.

6. The combination, with the extensible body, of the bracket hinged to the top of the body and provided with a top socket, and an open topped hose holder held in the socket, substantially as described.

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Witnesses:

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